

Claims

1. A system for presenting and controlling information on a display device and comprising a server, a wireless gateway
5 and said display device having a wireless module communicating with the server through the wireless gateway, and said server is adapted to update information presented on the display device through the wireless gateway.
- 10 2. A system according to claim 1, wherein the display device comprises a rotary member with a plurality of light emitting diodes of at least two colours arranged such that pairs of light emitting diodes of different colours will pass through
15 the same global point on the display once every revolution of the rotary member, and a processing unit able to control the light emitting diodes, such that the processing unit can create the impression of a global point of a chosen colour created by modulating the intensity of the light emitting diodes of different colour when they pass through said
20 global point.
3. A system according to any of claims 1 or 2 furthermore comprising a mobile device able to communicate with the server through the wireless gateway.
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4. A system according to claim 3, wherein the mobile device is adapted to update the display device with said information by communicating with the server through the wireless gateway.
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5. A system according to any of claims 1 to 4, wherein the wireless gateway operates in accordance with GSM, GPRS,

UMTS, 802.11b, bluetooth, I-mode, or any combination thereof.

6. A system according to any of claims 1 or 5 further
5 comprising one or more display devices, and wherein the server is adapted to multicast said information to the one or more display devices substantially simultaneously using the wireless gateway.
- 10 7. A system according to any of claims 1 to 6, wherein said information containing a text, a sound, an image, an audio-recording, a series of images, or any combination thereof.
- 15 8. A system according to claims 6 or 7, wherein the system is adapted to group the one or more display devices according to parameters set for each of the one or more display devices so as to display specific information for each group of the one or more display devices.
- 20 9. A system according to any of claims 1 to 8, wherein the server and the display device is connected to a communications network such as a wired or wireless dedicated line, local area network, metropolitan area network, wide area network, the Internet, or any combination thereof, so
25 as to enable communication between the server and the display device.
10. A system according to claim 9 further comprising a
computer connected to the communications network and
30 comprising a computer program for controlling the display device through the server.

11. A system according to claim 10, wherein said computer program comprising a transforming procedure adapted to transform said information from Cartesian to polar coordinates.
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12. A system according to claim 10, wherein said server is adapted to store and execute said computer program.
13. A system according to any of claims 1 to 12, wherein said
10 information is accessible by said display device utilizing a vector-based accessing format.
14. A system according to any of claims 1 to 13, wherein the
15 system is adapted to request an user payment for displaying information on the display device.
15. A system according to claim 14, wherein the payment is performed with a credit card.
- 20 16. A system according to any of claims 1 to 15, wherein the system is adapted to charge a mobile device for communicating with the server.
17. A system according to claim 16, wherein the charge is
25 carried out using overtaxed text message such as a short messaging service message.
18. A system according to any of claims 1 to 17, wherein a
30 mobile device is adapted to send a message to the server, which message comprises an unique ID tag for the display device.

19. A system according to any of claims 8 to 18, wherein the grouping is based on demographic information, such as location, average age, gender,
- 5 20. A system according to claim 19, wherein the demographic information is collected from the mobile device communicating with the server.
- 10 21. A system according to any of claims 3 to 20, wherein the mobile device provides configuration information to the server sorting the configuration information according to the ID tag of each display device.
- 15 22. A system according to any of claims 3 to 21, wherein said server is adapted to identify said mobile device, when said mobile device interacts with said display device through said server, and is adapted to generate a user profile for said mobile device.
- 20 23. A system according to any of claims 1 to 22, wherein said display device further comprises a recording device located on said rotary member for recording user interaction in a touch sensitive area.
- 25 24. A system according to claim 23, wherein said recording device comprises one or more sensors, the sensors being located so that each sensor is placed at a different length from the centre of rotation of the rotary member.
- 30 25. A system according to claim 24, wherein said one or more sensors are placed at regular intervals on the rotary member from the centre of rotation, to the edge.

26. A system according to any of claims 24 or 25, wherein said recording device further comprises a central processor adapted to receive input from said one or more sensors.

5 27. A system according to claim 26, wherein said central processor is adapted to hold information enabling said central processor to calculate the exact angle of a revolution of an associated rotating member in any specific point in time.

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28. A system according to any of claims 26 or 27, wherein said central processor is adapted to perform an action when an object is in the vicinity of said one or more sensors, said action being based on which global point on the display
15 device the object is in the vicinity of.

29. A system according to any of claims 24 to 28, wherein said one or more sensors are magnetic sensors registering changes in the magnetic field.

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30. A system according to any of claims 24 to 28, wherein said one or more sensors are acoustic sensors registering changes in sound volume or modulation.

25 31. A system according to any of claims 24 to 28, wherein said one or more sensors are light sensors registering changes in light intensity.

30 32. A system according to any of claims 1 to 31, wherein said rotary member is fixated at one of its distal ends to a rotation axle.

33. A system according to any of claims 1 to 31, wherein said rotary member is fixated at its centre point to a rotation axle having said plurality of light emitting diodes placed on each side of said centre point.

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34. A system according to any of claims 1 to 33, wherein said rotary member comprising a longitudinal cross-sectional profile formed to illustrate when rotating a specific shape such as a bottle, a house, a glass, or a car.

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35. A system according to any of claims 1 to 34, wherein said rotary member comprises a semicircular longitudinal cross-sectional profile thereby when rotating said rotary member generating a spherical viewing surface.

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36. A system according to claim 35, wherein said server comprises a zooming function operable to zoom in on said information presented on said rotary member generating a spherical viewing surface.

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37. A system according to any of claims 1 to 36, wherein said rotary member comprises a longitudinal cross-sectional profile being open-sided triangular, open-sided square, semi-elliptical, or any combination thereof.

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38. A system according to any of claims 9 to 37, wherein said server comprising a web-based search engine enabling computers connecting to said server through said communication network searches for a specific display device according to searching parameters, such as geographic or demographic data, and enabling said computers to request information to be forwarded to a selected display device.

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39. A system according to any of claims 1 to 38, wherein said server is adapted to calculate a price for providing said information on said display device in accordance with an assessment of number of viewers at said display device.

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40. A system according to claim 39, wherein said system further comprising a counter for counting number of viewers at said display device, which counter is operable to provide a count value on reception of a sensor signal from a sensor
10 such as a camera, microphone, infrared sensor, or pressure sensor, and said server performing said assessment on the basis of said count value.

41. A system according to claim 40, wherein said server is
15 adapted to store said sensor signal in a searchable database and to perform a comparison of said sensor signal with content of said searchable database.

42. A system according to any of claims 1 to 41 further
20 comprises a connection for linking to a peripheral equipment such as a cash register.

43. A display device comprising a rotary member with a plurality of light emitting diodes of at least two colours
25 arranged such that pairs of light emitting diodes of different colours will pass through the same global point on the display once every revolution of the rotary member, and a processing unit able to control the light emitting diodes, such that the processing unit can create the impression of a
30 global point of a chosen colour created by modulating the intensity of the light emitting diodes of different colour when they pass through said global point.

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44. A display device according to claim 43, wherein the display device incorporates any features of the system according to claims 1 to 42.